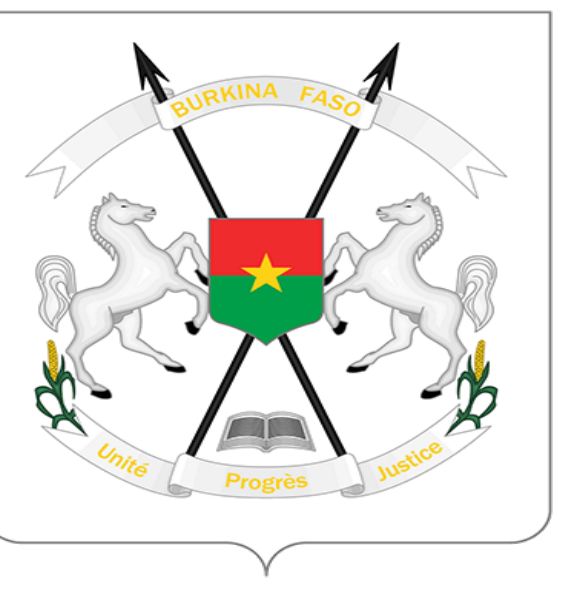


Implementing the lymphatic filariasis repeat pre-transmission survey in a context of insecurity in two health districts in Burkina Faso

Poster
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Introduction

Lymphatic Filariasis (LF) was endemic in all 70 health districts (HDs) of Burkina Faso. Since 2019, LF transmission assessment surveys (TAS) have been postponed in some areas of the country due to insecurity. The NTDP conducted a repeat pre-transmission assessment survey (re-pre-TAS) in two insecure HDs in 2022: Fada N'gourma and Tenkodogo. These were the fifth pre-TAS in Fada and fourth pre-TAS in Tenkodogo; both most recently failed re-pre-TAS in 2020. The objectives were to assess the current prevalence of LF and to test the feasibility of a new approach to implement surveys in a context of insecurity.

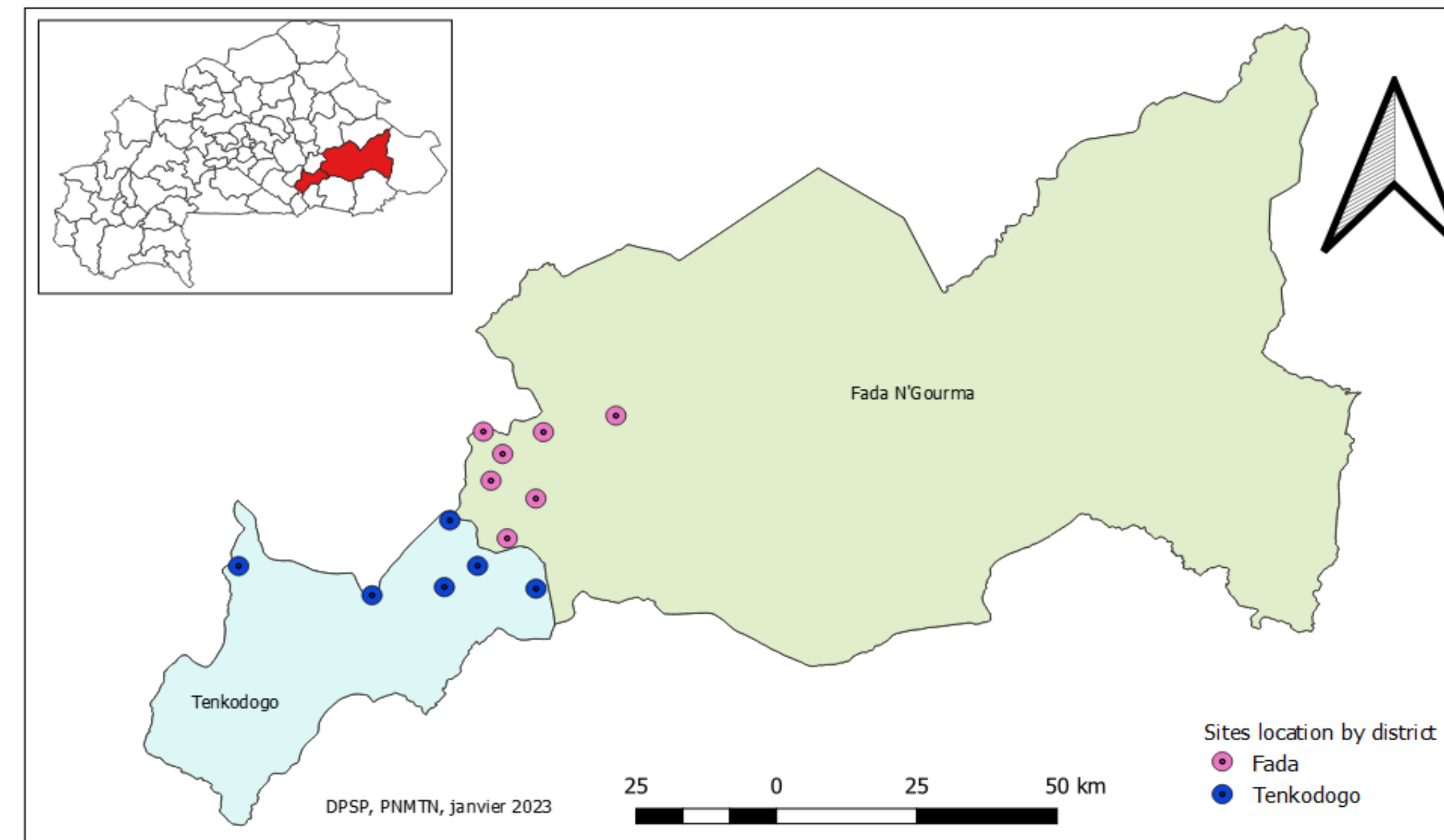
The local population still lives in these insecure areas, most facilities are still functional, routine activities and campaigns can only be carried out by local staff, and motorized transport is still possible for local workers.

Methods

- The study consisted in collecting blood samples from individuals ages ≥ 5 years for filariasis test strip (FTS) tests and then carrying out microfilaremia (mf) on positive cases of FTS using new blood samples.
- Mitigation measures were taken to ensure the security of interviewers and respondents.
- It was conducted in 7 sentinel and spot check sites in Fada N'Gourma and in 6 sites in Tenkodogo, from December 17, 2022 to January 16, 2023.
- Data were collected on age, sex, treatment status, and results of filariasis test strip (FTS) from 4,403 individuals ≥ 5 years.
- Data collection was carried out by local health center workers who were trained at the health district (HD) level on the survey methodology, the use of the FTS and electronic data collection via ESPEN collect. The managers of the health facilities were trained as well.
- The NTDP conducted daily remote supervision to ensure quality data collection.
- The overnight blood samples from FTS-positive individuals were sent to the district laboratory for microfilaria testing, despite the security situation.
- Blood samples of former FTS positives from the 2020 survey who were still FTS positive in 2022 and had a negative mf were excluded from the analysis.

Results

Figure 1: Map of surveyed sites



Of the 4,403 people tested, 61.1% were female and 51.3% were adults (≥ 15 years). Over 92% of the people surveyed reported having swallowed ivermectin and albendazole at least once. At the end of this process, 4,322 blood samples were validated for the analysis. The filarial antigen prevalence was below 2% in 10 sites and between 2% and 4% in three sites.

Table 1: Distribution of raw prevalence by site

District	Site	Tested	FTS results			FTS prevalence (%)
			Positive	Negative	Indéterminée	
Fada	Koulpissi	322	7	315	0	2,17
Fada	Poessemtinga	307	3	298	6	1
Fada	Silmissin	318	2	313	3	0,63
Fada	Tangaye	341	5	334	2	1,47
Fada	Tengande	345	9	336	0	2,61
Fada	Tilonti	327	3	323	1	0,92
Fada	Yamwega	320	2	309	9	0,63
Tenkodogo	Benna	380	5	372	3	1,32
Tenkodogo	Kinzeoghin	325	3	316	6	0,92
Tenkodogo	Sabtenga	355	0	351	4	0
Tenkodogo	Syalghin	354	8	343	3	2,27
Tenkodogo	Tirogho	305	5	297	3	1,65
Tenkodogo	Wantanghin	323	4	312	7	1,26
Total		4 322	56	4 219	47	

Table 2: Number of positives by age group

District	Village	age range			
		5-9 years	10-14 years	15-19 years	≥ 20 years
Fada	Koulpissi		1		6
Fada	Poessemtinga			1	2
Fada	Silmissin				2
Fada	Tangaye				5
Fada	Tengande	1			8
Fada	Tilonti				3
Fada	Yamwega				2
Tenkodogo	Benna				5
Tenkodogo	Kinzeoghin				3
Tenkodogo	Sabtenga				
Tenkodogo	Syalghin			1	7
Tenkodogo	Tirogho			1	4
Tenkodogo	Wantanghin			2	2
Total		1	1	5	49

Discussion

The NTDP sought and obtained WHO advice to continue to TAS1 because most positives (96, 49%) were over 15 years old and mf was negative in all positives.

The adaptative strategy of using trained local health workers who are generally accepted in the villages for data collection with discrete logistics and remote monitoring and supervision made it possible to successfully complete re-pre-TAS surveys in the two insecure HDs. However, this requires 3 to 5 days of training of the surveyors to ensure that they have mastered the survey methodology, the use of FTS and mobile data collection.

Given the success achieved in two pilot HDs, the same strategy will be used for conducting surveys in other insecure areas.



Meeting with surveyors (local agents) before the start of the practical phase



Practical phase of training in Tenkodogo: enrolment of participants

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